



Please Enter the Name of Your Local Government:
Town of Apex

State of North Carolina

Department of Environment and Natural Resources

Division of Waste Management &

Division of Pollution Prevention and Environmental Assistance

Solid Waste Management Annual Report July 1, 2007 -- June 30, 2008

COMPLETION AND SUBMISSION OF THIS REPORT WILL FULFILL THE ANNUAL REPORTING
MANDATE TO THE STATE AS REQUIRED BY G.S. 130 A_309.09A.

Please submit the report to the State by AUGUST 11, 2008.

If you have questions or concerns, please contact the Division of Pollution Prevention and Environmental Assistance at 919-715-6500, the Solid Waste Section at 919-508-8400, or your Regional Environmental Senior Specialist.

Person Completing This Report: Steven Miller

Title: PW Engineering Project Coordinator

Mailing Address: P.O. Box 250

City: Apex

Zip: 27502

Phone: 919-249-3427

Fax: 919-367-2808

Date: 8-14-2008

Email: Steve.Miller@apexnc.org

General Instructions

Please remember that the time period for the report is JULY 1, 2007 through JUNE 30, 2008. Please check "No" if you have nothing to report for a specific question.

1. Did your local government have a Recycling Coordinator or similar position for FY 07-08? ☒ Yes ☐ No

Name Recycling Coordinator (if different from person completing this report.)

Name: Mike Deaton

Title: Environmental Programs Manager

Address: P.O. Box 250

City: Apex

Zip: 27502

Telephone: 919-249-3427

Fax: 919-367-2808

Email: Michael.Deaton@apexnc.org

2. Did your local government have a Solid Waste Director or similar position for FY 07-08? ☐ Yes ☒ No

If Yes, Name:

Title:

Address:

City:

Zip:

Telephone:

Fax:

Email:

3. Did your local government have dedicated or part-time Enforcement Staff for FY 07-08? ☐ Yes ☒ No

If Yes, Name:

Title:

Address:

City:

Zip:

Telephone:

Fax:

Email:

4. Did your local government manage, provide or contract for any solid waste services in FY 2007-08 (e.g., collection, disposal, recycling, mulching, composting)? ☒ Yes ☐ No

If No, the report is complete, please turn the report into your County Manager.

Part I. Full Cost Accounting

5. What were the full costs of your local government's solid waste management program? To the best of your ability, please respond in the chart below. The following information will be needed to determine your cost per household and cost per ton.

a. Solid Waste Collection - Number of Households Served: 10,898

b*. Municipal Waste Disposal - Total Tonnage of MSW Disposed by the Local Government: 13,319

c. Reduction, Reuse, Recycling - Number of Households served by the Recycling Program: 11,536

d*. Reduction, Reuse, Recycling - Total Tonnage of Recyclables Recovered by the Local Government: 2,727

e. Mulching/Composting - Number of Households Served by the Mulching/Composting Program: 10,898

f*. Mulching/Composting - Total Tonnage Handled by the Mulching/Composting Program: 3,952

To calculate the total cost per ton in the table below, **DO NOT** add the cost per ton of the 4 program categories; the total cost of all programs should be divided by the total tonnage managed by the local government.

Equation: Total cost per ton = [(program cost 1+2+3+4)/(b+d+f)]

Note: For additional assistance with this section, please contact your manager or finance director.

	1. Solid Waste Collection	2. Municipal Solid Waste Disposal**	3. Reduction, Reuse and Recycling	4. Mulching, Composting and Other Programs	Total Cost
Program Cost*	797,740.60	642,744.41	281,828.52	446,144.00	2,168,427.50
Cost per Household***	73.20	58.98	24.43	40.94	
Cost per Ton	59.89	48.26	103.33	112.89	108.43

* Item is needed to calculate cost per household and/or costs per ton.

** Estimate either 1. Full-cost of disposal (landfill, transfer station, etc.) including applicable closure costs, or 2. The tipping fee paid by your local government to a disposal facility.

*** If you are collecting commercial/industrial solid waste or recyclables, you do not need to complete the cost per household section.

Overall Program Cost from above (1+2+3+4) = 2,168,427.50

Total Tonnage Managed (b+d+f) = 19,998

6. If your local government contracts for solid waste or recycling services, please report the annual contract amount.

\$1,440,785.00 For solid waste services per year

\$281,828.52 For recycling per year

OR

\$ Combined Contract (solid waste and recycling)

According to *GS 130A-309.08*, local governments are required to conduct full cost accounting annually and to develop a system to inform users of such costs.

Part II. In-House Programs

The following questions pertain to in-house activities, that is waste reduction activities/programs that are available to local government employees.

7. Did your local government have an in-house waste reduction program in place? ☒ Yes ☐ No
8. If yes, indicate what types of waste reduction activities were in place:
☐ Source reduction/toxicity reduction ☒ Recycling ☒ Reuse
9. Did your local government have any program/policy encouraging or requiring local agencies to purchase products with recycled content? ☐ Yes ☒ No

Part III. Public Programs

Source Reduction / Reuse

Source Reduction is defined as avoiding the creation of waste by reducing the amount or toxicity of waste before it is generated, i.e., duplex copying and/or printing or other similar action that avoids the generation of solid waste. Source reduction is not recycling. Reuse programs target items that are in adequate condition or of value such that they do not warrant disposal. Reuse includes programs such as paint exchanges or pallet exchanges.

10. Did your local government have a backyard composting program? ☒ Yes ☐ No
11. If yes, please check all that apply:
☒ Promotion ☐ Training
☐ Education ☒ Bin distribution/sales
☐ Demonstration site(s) Number of Bins distributed? 28
12. Did your local government have a source reduction program targeted to the public? ☒ Yes ☐ No
13. If yes, please indicate the types of activities promoted:
☒ Grasseycling ☐ Enviroshopping (shopping for source reduction)
☐ Xeriscaping (landscaping with less water) ☐ Use of non-toxics in homes/businesses
☒ Junk Mail Reduction ☒ Other Compost Bins sales and Promotions
14. Did your local government offer a waste exchange or reuse program? ☐ Yes ☒ No
15. If yes, please indicate which programs were available to the public:
☐ Swap shop/shed ☐ Waste exchange
 Number of sheds in use? ☐ Pallet exchange
☐ Paint exchange ☐ Other
 Number of gallons recovered?

Recyclables Recovery

After source reduction, recycling is the State's next highest priority for managing solid waste. The following questions deal with your local government's programs for recovering recyclables.



16. Which of the following responses best describes your recyclables recovery activities for the period July 1, 2007 through June 30, 2008?
- ☒ My local government **DID operate or contract** for a recyclables recovery program.
- ☐ My local government **DID NOT operate or contract** for recyclables recovery **BUT DID participate** in a recyclables recovery program sponsored by another local government. (Please identify the public agency/organization responsible for its operation; then go to Part IV on page 7.)
With what local government did you participate? _____
- ☐ My local government **DID NOT operate, contract or participate** in a recycling program. (Go to Part IV on page 7.)

If you **DID operate or contract** for a recyclables recovery program, please indicate the type of program in operation and specifics about your program.

CURBSIDE RECYCLING PROGRAM

17. Curbside Recycling Program ☒ Yes ☐ No
18. Who collected the recyclable materials for your local government's curbside program?
- ☐ Local government employees
- ☒ Private contractor Waste Industries
- ☐ Other (please specify) _____
19. Please answer the following questions about your community.
- a. Total number of households? 10,898
- b. Number of households served by curbside recycling? 11,536
- c. Please estimate the number of households that regularly participate in the program? 7,146
20. What sector(s) of your community was served by the program?
- ☒ Residential ☒ Commercial ☐ Industrial
21. If you checked commercial or industrial in question 20, please indicate the number of accounts served: 132
22. How frequently were the curbside recyclables collected?
- ☒ Once a week ☐ Twice a month
- ☐ Every two weeks ☐ Other _____
23. Please describe the containers used.
- ☒ Bins ☐ Blue bags
- ☐ Multi-bin system ☐ Roll-out carts

DROP-OFF RECYCLING PROGRAM

24. Drop-off Recycling Program? ☒ Yes ☐ No
25. Who collected the recyclable materials for your local government's drop-off recycling program?
☒ Local government employees
☐ Private contractor _____
☐ Other (please specify) _____
26. Please estimate the number of households served. 10,898
27. Please estimate the number of households that actively use your local government's drop-off recycling program. 132
28. What sector(s) of your community was served by the program?
☒ Residential ☐ Commercial ☐ Industrial
29. How many drop-off locations did you provide for the citizens in your jurisdiction? Number of Sites: 1
30. How many of these locations were staffed with attendants?
☒ All
☐ Some (please identify how many) _____
☐ None

MIXED WASTE PROCESSING

31. Mixed Waste Processing - Did your local government utilize mixed waste processing? ☐ Yes ☒ No

Note: Mixed waste processing requires the use of a permitted facility where select recyclables are removed from municipal solid waste.

OTHER RECYCLING PROGRAMS

DO NOT include in-house activities here. List only programs operated or contracted for by the local government.

32. Please identify all "Other" programs available during FY 07-08. (check all that apply and indicate tonnages on the next page)
- ☒ Electronics Recycling
☒ Permanent ☐ Annual or Scheduled Collection Days ☐ Part of HHW Program
- ☐ School-based Programs
- ☐ Scheduled collection drives (quarterly, once a year, etc.)
- ☒ Curbside White Goods Collection
 Were white goods delivered to the county for marketing? ☒ Yes ☐ No
- ☐ Commercial Collections _____
- ☐ Industrial Collections _____
- ☒ Other Programs (please specify) Used Motor Oil Drop Off
33. Does your local government provide on-site recycling services to Alcoholic Beverage Commission permit holders? ☐ Yes ☒ No
- ☐ On-site services Provided Estimated number of ABC accounts: _____
- ☐ Drop-off sites available _____

RECYCLING TONNAGES

- a. For ALL the recycling programs operated or contracted for by your local government, please provide TONNAGES (or estimates) for each material collected for the period JULY 1, 2007 through JUNE 30, 2008.
- b. Do NOT report YARD WASTE, TIRES, USED OIL, LEAD ACID BATTERIES, or ANTI-FREEZE tonnages on this page.
- c. Please report materials collected in tons only. (One ton equals 2,000 lbs.) For example, 2,500 lbs. should be reported as 1.25 tons. Please only extend numbers to two decimal places (x.xx).

PROGRAM	Curbside		Drop-off		Mixed Waste Processing		All "Other" Programs		Total Tons
	Collect? <input checked="" type="checkbox"/> if Yes	Tons	Collect? <input checked="" type="checkbox"/> if Yes	Tons	Collect? <input checked="" type="checkbox"/> if Yes	Tons	Collect? <input checked="" type="checkbox"/> if Yes	Tons	
GLASS									
Clear	<input checked="" type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
Brown	<input checked="" type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
Green	<input checked="" type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
Mixed		561.25							
PLASTIC									
PETE #1	<input checked="" type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
HDPE #2	<input checked="" type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
Other Plastic	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
Mixed Plastic	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
All Plastic Bottles	<input type="checkbox"/>	323.80	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
METAL									
Aluminum Cans	<input checked="" type="checkbox"/>	129.52	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
Steel Cans	<input checked="" type="checkbox"/>	43.17	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
White Goods	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
Other Metal	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
PAPER									
Newsprint (ONP)	<input checked="" type="checkbox"/>	797.59	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
Cardboard (OCC)	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
Magazines (OMG)	<input checked="" type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
Office Paper	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
Mixed Paper (MPW)	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
Other Paper	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
WOOD									
Pallets (refurbished, reused, fuel)	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
Other wood - DO NOT list wood tons here from yard waste pg. 8	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
OTHER MATERIALS									
Textiles	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
Electronics	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
C&D Recovery	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
Cardboard	<input checked="" type="checkbox"/>	850.42	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
Junk Mail	<input checked="" type="checkbox"/>	21.58	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
Commingled tons (check all items collected above)	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		
TOTAL TONS:		2727.55							

Part IV. Special Wastes

The following questions concern your local government's provisions for managing waste materials that require special handling or are banned from landfilling.

Used Oil and Oil Filters

34. Did your local government provide public collection sites for used oil? ☒ Yes ☐ No
35. If Yes, how many sites? 1
36. Number of gallons collected? 2115 gallons
37. Did your local government provide public collection sites for used oil filters? ☐ Yes ☒ No
38. If Yes, how many sites? _____
39. Amount collected: _____ Filters or _____ Barrels or _____ Tons

Antifreeze

40. Did your local government provide public collection sites for antifreeze? ☐ Yes ☒ No
41. If Yes, how many sites? _____
42. Number of gallons collected? _____ gallons

Lead Acid Batteries

43. Did your local government provide public collection sites for antifreeze? ☐ Yes ☒ No
44. If Yes, how many sites? _____
45. Number of batteries collected? _____ batteries

Tires

46. If collected, how many tons of tires did your program recover? _____ tons

Household Hazardous Waste (HHW)

47. Did your local government provide for the collection of pesticide containers (e.g., NCDA program)? ☐ Yes ☒ No
48. Did your local government offer a latex paint collection program separate from the collection of household hazardous waste? ☐ Yes ☒ No
49. Did your local government provide specifically for the collection of household hazardous waste? ☐ Yes ☒ No
- If Yes, please respond to the following questions:
- a. Was it collected at a permanent site? ☐ Yes ☐ No
- b. Quantities collected (in pounds) _____ pounds
- c. Frequency of collection _____
- d. Contractor(s) involved _____
- e. Estimated cost of the program _____

Part V. Mulching, Composting and C&D Management

Yard waste may not be disposed in sanitary landfills, incinerators, or in unpermitted sites and it is illegal to burn. Composting and mulching are popular management options.

50. Does your local government provide either of the following? ☐ C&D recycling ☐ C&D salvage/reuse

If yes, check all materials that were included (please report tonnages in tonnage table on page 6):

☐ Clean Wood ☐ Brick, concrete, etc. ☐ Sheetrock ☐ Vinyl siding ☐ Metals ☐ Other

51. Does your local government have an ordinance regulating the management of construction and demolition waste? ☐ Yes ☒ No

52. Does your local government collect yard waste at curbside? ☒ Yes ☐ No

53. Does your local government provide a drop-off site for yard waste collection? ☐ Yes ☒ No

54. Where is collected yard waste taken? Hwy. 55 C&D Landfill

55. What quantities of materials were managed in your program? Provide information in TONS OR CUBIC YARDS of material received. For conversion purposes, use 400 lbs./cubic yd.

Destination	Check box if destination is used	Organic Debris (yard waste, brush, limbs, etc.)	
		Tons	Cubic Yards
End user (to farmer or home-owner)	<input checked="" type="checkbox"/>	20	
Your own local government's mulch or compost facility	<input type="checkbox"/>		
Other public mulch or compost facility	<input type="checkbox"/>		
Private mulch or compost facility	<input type="checkbox"/>		
Land clearing and inert debris landfill (LCID)	<input checked="" type="checkbox"/>	3932	
Total		3952	

YARD WASTE MANAGEMENT FORMULA: Use this formula for each truck you use in your yard waste management program. Put the grand total for all trucks in the appropriate boxes above. *Ex. 10 yd³ truck x 3 days/wk x 16 wks = 480 yd³*

$$\text{Size of Truck (in yards)} \times \text{Avg. no. of times truck fills each week} \times \text{\# of weeks truck is used during year} = \text{TOTAL yd}^3$$

Part VI. Solid Waste Collection & Disposal

56. Please estimate the population of your community _____

57. Please complete the following table regarding your solid waste collection (curbside or drop-off programs) and disposal program.

Sector	Who Collects Solid Waste? Insert Letter - see codes below	How is Solid Waste Collected? Insert No. - see codes below
Residential	B	1
Commercial	B	2
Industrial	D	N/A

Who Collects Solid Waste?
 a. Local government employees
 b. By Contract
 c. Franchise haulers
 d. Local government not involved in provision of service

How is Solid Waste Collected?
 1. Once a week at household
 2. Twice a week at household
 3. Convenience center/greenbox
 4. As needed or by request
 5. Daily
 6. Other

58. If collected at the household, where is solid waste picked up? ☐ Rear yard ☒ Curbside

59. What type of curbside collection method is used?

☐ Fully Automated ☒ Semi-Automated ☐ Manual ☐ Don't know

Part VII. Solid Waste Educational Activities

60. Did your local government have an education program to inform the citizens specifically about solid waste management issues/activities? ☒ Yes ☐ No (If No, skip to Part VIII)

61. Which of the following solid waste education activities did your local government conduct or produce? (Check all that apply)

- | | |
|---|--|
| <input type="checkbox"/> Radio/TV advertisements | <input checked="" type="checkbox"/> Website |
| <input type="checkbox"/> Block leader program | <input type="checkbox"/> "RE 3" Campaign |
| <input checked="" type="checkbox"/> Newspaper ads/articles | <input type="checkbox"/> "The Recycle Guys" |
| <input checked="" type="checkbox"/> Mass mailings/utility bills, etc. | <input type="checkbox"/> Reward Program |
| <input type="checkbox"/> Award program for businesses | <input type="checkbox"/> Workshops, forums, or conferences |
| <input type="checkbox"/> Grant program for businesses | <input type="checkbox"/> Public schools programs |
| <input type="checkbox"/> Take-home items (brochures, magnets, etc.) | <input checked="" type="checkbox"/> Special events |
| <input type="checkbox"/> Telephone "hotline" | <input type="checkbox"/> Other (please specify) _____ |



62. Please provide your recycling website address and hotline phone number if applicable.

Website: www.apexnc.org/depts/pw/recycle

Hotline: 919-249-3427

Part VIII. Resources for Solid Waste Management

Sufficient resources available to solid waste management programs are essential for continued success of these programs. The following questions deal with resources allocated to solid waste management programs.

63. Did your local government operate an Enterprise Fund for solid waste services? ☐ Yes ☒ No

64. With regards to funding mechanisms, check all that apply to your local government:

- | | | |
|---|---|--|
| <input type="checkbox"/> Tipping fees | <input type="checkbox"/> Volume/weight-based fees (e.g. PAYT) | <input type="checkbox"/> Tire tax |
| <input checked="" type="checkbox"/> Property taxes/general fund | <input type="checkbox"/> Sale of recyclables | <input type="checkbox"/> White Goods tax |
| <input checked="" type="checkbox"/> Per household charges | <input type="checkbox"/> Grants | <input type="checkbox"/> Other |

65. If applicable, please provide your FY 07-08 household fees. (e.g., a. \$45.00 per year per household for solid waste)

a. \$ 8 92 per Month per Household for solid waste

b. \$ 2 05 per Month per Household for recycling

c. \$ 3 00 per Month per Household for yard waste

d. \$ _____ per See Next Sheet per _____ for bulky waste

e. \$ _____ per _____ per _____ availability fee

f. \$ 13 97 per Month per Household total charge

66. Did your local government have a Pay-As-You-Throw program for residential garbage? (Residents are charged by weight or volume for the amount of trash disposed.) ☐ Yes ☒ No

Comments

We would appreciate your comments about this report or other matters regarding solid waste management in North Carolina. Thank you for your time. Attach additional sheets if needed.

GARBAGE

Residential

\$8.92 (Monthly Charge)

- Curb-side Service

- Emptied 1 Time per Week

\$3.00 Yard Waste

Commercial

\$17.84 (Monthly Charge)

- Emptied 2 Times per Week

Dumpster Service

4 CY - \$105.12 (Monthly Charge)

6 CY - \$141.44 (Monthly Charge)

8 CY - \$184.59 (Monthly Charge)

* All Dumpsters Emptied 2 Times per Week.

Recycling

Residential & Commercial

\$2.05 (Monthly Charge)

Assistance

The Division of Pollution Prevention and Environmental Assistance's Local Government Assistance Team is ready to assist you in any way we can. Please visit our Web site at www.p2pays.org/localgov or e-mail us at jim.hickman@ncmail.net



www.CLEANUP.org
1-800-CLEANUP